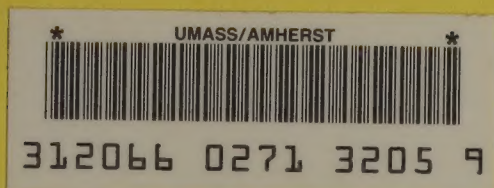


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BRANCHING OUT:

An
**OUTDOOR
EDUCATION**
Resource Guide



GOVERNMENT DOCUMENTS
COLLECTION

OCT 21 1987

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OUTDOOR EDUCATION RESOURCE GUIDE LUCRETIA CROCKER FELLOWSHIP PROGRAM '87

**COMPILED BY
BRUCE ROBERT DEAN**

The information that follows in this guide is the result of a conscious effort to record and make available any sources that I learned about during my outstanding fellowship year. Massachusetts Public Schools have wonderful professionals working with our children. Too often we are so busy doing, we don't have a chance to find out what else is out there. By networking established environmental education programs that are in the schools and sources/resources that serve the Commonwealth, those who are interested and committed to developing outdoor education programs in public education will have access to some of the myriad of excellent organizations, museums, environmental centers, and individuals who are sharing their concern.

ACKNOWLEDGMENTS:

In this pursuit I took advantage of the expertise of Rick Paula and the resources at the Chapter 1 Computer Cooperative Center in Framingham.

Secondly I must thank Jeffrey Schwartz who granted permission to include any resources from his recent published New England Field Guide that I had not uncovered. Jeffrey has edited an excellent, comprehensive guide:

THE NEW ENGLAND FIELD GUIDE TO ENVIRONMENTAL EDUCATION FACILITIES AND RESOURCES - 1986 - 87

Copies may be obtained by sending \$16 & \$1.50 postage and handling per copy to: New England Field Guide, Antioch/ New England, Roxbury St., Keene, N.H. 03431. Make checks payable to Antioch/NE Graduate School.

Another excellent publication:

ENVIRONMENT FOR LEARNING: USING COMMUNITY RESOURCES FOR THE GIFTED

Order from: Dr. E Suzanne Richert, Ph.D.
Educational Information and Resource Center - Gifted
207 Delsea Drive, R.D. 4, Box 209
Sewell, New Jersey 08080
#EA-8.....\$6 per copy (minimum order \$10 & 15% shipping & handling)
Make checks payable to: EIRC/Gifted

FOR ADDITIONAL COPIES OF THIS OUTDOOR ED RESOURCE GUIDE

Contact: Citizens' Educational Resource Center
Beaman St. Route 140
West Boylston, MA 01583
617 835-6056

Cost is \$3.00 per copy. Please make checks payable to CERC

OUTLINE OF THE OUTLOOK FOR RESOURCES GUIDE
FOR ADDITIONAL COPIES OF THE OUTLOOK FOR RESOURCES GUIDE

COMMITTEE
DIRECTOR: ROBERT L. DEAN

DEDICATED
IN LOVING MEMORY OF
CHARLOTTE LANCE

ACKNOWLEDGEMENTS

In this guide I wish to acknowledge the support of the Lance and the members of the Chapter 1 Committee. I wish to thank the following individuals for their help and support in the development of this guide: Robert L. Dean, Director of the Committee; and the following individuals: [names listed]

THE NEW ENGLAND GUIDE TO ENVIRONMENTAL EDUCATION
PUBLISHERS AND RESOURCES - 1985 - 87

Copies may be ordered by sending \$10 & \$1.25 postage and handling per copy to New England Field Guide, American New England, Room 20, Boston, MA 02111. Make checks payable to American New England School.

Another excellent publication is "Environmental Education: A Guide for Teachers" by [author], published by [publisher].

Order from: Dr. E. [name], [address], [city], [state], [zip].
Educational Resources and Research Center, 1111
101 [address], [city], [state], [zip].
Send [amount] per copy and order \$10 & \$1.25 shipping & handling.

FOR ADDITIONAL COPIES OF THE OUTLOOK FOR RESOURCES GUIDE
Contact: [name], [address], [city], [state], [zip].
[phone number]
[fax number]

It is a simple fact that most of the peak experiences for students take place not in the classroom behind a text, but in, or in association with the world outside that classroom. The extent to which we, as teachers can meld the two together into one powerful force is the extent to which schools, I believe, begin to make some sense.

Eliot Wigginton
Foxfire

The best farming requires a farmer - a husbandman, a nurturer - not a technician or businessman. A technician or a businessman, given the necessary abilities and ambitions, can be made in a little while, by training. A good farmer, on the other hand, is a cultural product; he is made by a sort of training, certainly, in what his time imposes or demands, but he is also made by generations of experience. This essential experience can only be accumulated, tested, preserved, handed down in settled households, friendships, and communities that are deliberately and carefully native to their ground, in which the past has prepared the present and the present safeguards the future.

Wendell Berry
The Unsettling of America: Culture & Agriculture

We find that given the right environment
And thought ful answers to its questions
The child has everything it needs educationally
Right from birth.
We have thought erroneously of education
As the mature wisdom
And over-brimming knowledge of the grownups
Injected by the discipline pump
Into the otherwise 'empty' child's head.
Sometimes parents say "don't"
Because they want to protect the child
From getting into trouble.
At other times when they fail to say "no"
The child gets into trouble.
The child, frustrated, stops exploring.
It is possible to design environments
Within which the child will be
Neither frustrated nor hurt
Yet free to self-educate, spontaneously and fully
Without trespassing on others.
I have learned to undertake
Reform of the environment
And not to try to reform man.
If we design the environment properly
It will permit both child and adult to develop safely
And to behave logically.

R. Buckminster Fuller
And It Came to Pass - Not To Stay

ADVENTURE PLAY

Name CHILDREN'S PLAYGROUNDS	Address PO Box 1547	City State ZipCode Cambridge, MA 02238
Phone Number 617 497-1588	Type COMMERCIAL PLAYGROUND CO.	

Consulting work with community built playgrounds. Interlinked systems, custom designed for handicapped access. Options for commercial or community installations.

Name CUSTOM PLAYGROUNDS	Address	City State ZipCode Manchester, CT. 06040	
Contact Tom Bowler	Position play consultant	Phone Number 203 649-8088	Type COMMUNITY PLAYGROUND BUILDER

Consulting work with community-built playgrounds using tires, wood deck systems, and PVC pipe.

Name GREAT NORTHERN SWING COMPANY	Address 187 Neck Rd., Box 230	City State ZipCode Haverhill, MA 01830-0530	
Contact Susanne Walsh	Position Sales Manager	Phone Number 617 372-8554	Type COMMERCIAL PLAYGROUNDS

Equipment needs evaluation. Custom design & manufacturing, delivery and installation. Year round service as well as annual equipment safety check-ups. Co-sponsored fundraising program. 12% financing available.

Name JEFF OLSON, INC.	Address RD #2, Box 249	City State ZipCode Marathon, NY 13803
Contact Kit Minervini	Phone Number 800 345-6956	Type COMMERCIAL PLAYGROUND CO. REP.

Name LEARNING STRUCTURES INC	Address 799 South St	City State ZipCode Portsmouth, New Hampshire 03801	
Contact Kit Clews	Position architect designer/builder	Phone Number 603 436-5911	Type COMMUNITY PLAYGROUND BUILDER

The Adventure Garden is a synthesis of the European Adventure Playground and the American concept of community involvement. Combining his training in architecture with his interest in designing for children, Christopher Clews has developed the Adventure Garden system of playground construction. The method, which he has continued to evolve since 1972, enables a school or community group to plan and build a high quality play environment on a minimal budget. 50 - 200 volunteers; one or two site preparation days; 2 - 3 construction days.

Name M.E. O'BRIEN & SONS, INC.	Address 220 Boylston St	City State ZipCode Chestnut Hill, Ma 02167
Phone Number 617 332-8002	Type COMMERCIAL PLAYGROUND EQUIPMENT	

Name OUTDOOR LEADERSHIP PROGRAM	Address Greenfield Community College	City State ZipCode Greenfield, MA 01301	
Contact Dr. Larry Buell	Position Coordinator	Phone Number 413 774-3131	Type ADVENTURE; SCHOOL PROGRAMS; PROFESSIONAL DEVELOPMENT

Outdoor leadership training program; public environmental awareness; outdoor adventure programs & services; environmental awareness publications and Outdoor Pursuits Center.

Name PLAYSPACE	Address 27 Goodnow Rd	City State ZipCode Princeton, MA 01541	
Contact Bruce Robert Dean	Position designer/builder	Phone Number 617 464-2447	Type COMMUNITY PLAY- GROUND CONSULTANT

Slide/lecture presentation to community groups. Serve as consultant and designer for community-built playground projects. Work with design committee of five members. Supervise community-volunteer construction crew on two to three day workdays to accomplish schoolyards and outdoor spaces as nature centers, outdoor classrooms, community playparks. Liability release a prerequisite.

Name PRO-IMAGE CORPORATE HEALTH RES.	Address 26 Brookdale Ave.	City State ZipCode Wellesley, MA 02181
Contact Thomas H. Andrews	Phone Number 617 431-1616	Type ADVENTURE PLAYGROUND / CONSULTANTS

Ropes Course Construction, Inspection. Staff Training: Ropes Course and Rock Climbing; Adventure Day Programs; Local Wilderness Trips; Management/organization Training & Development; Outdoor Instructor Training - Ropes, Rock Climbing; Canoeing; Rafting.

Name PROJECT ADVENTURE	Address Box 100	City State ZipCode Hamilton, MA 01936	
Contact Dick Prouty	Position director	Phone Number 617 468-7981	Type ADVENTURE PLAY SCHOOL PROGRAM

An interdisciplinary program involving experience-based learning in academics along with group problem solving and an alternative physical education program out-of-doors and indoors as well. Combination of Outward Bound techniques and philosophy with a group problem solving approach to learning and teaching.

Name ROBERT S. LEATHERS	Address 909 Wyckoff Rd	City State ZipCode Ithaca, New York 14850
Position Architect	Phone Number 607 277-1650	Type COMMUNITY PLAYGROUND BUILDER

ENVIRONMENTAL EDUCATION

Name	Address	City State ZipCode	
ARNOLD ARBORETUM, THE	The Arborway	Jamaica Plain, MA 02130	
Contact	Position	Phone Number	Type
Diane Syverson	Children's Program Coordinator	617 524-1718	ENVIRONMENTAL ED; SCHOOL PROGRAM

For groups of children in grades 3 - 6. Each experience takes two hours and uses the Arboretum's extensive collection of trees and shrubs from all over the world to provide a hands-on lesson, including botany, ecology, horticulture, and natural history. Small collection of books, articles, filmstrips, slides, and posters for free loan to teachers by appointment.

<u>Name</u>		City State ZipCode	
BECKET/ CHIMNEY CORNERS YMCA		Becket, MA 01223	
Contact	Position	Phone Number	Type
David Deluca	director	413 623-8991 or 6444	ENVIRONMENTAL EDUCATION CENTER

Offer outdoor education programming and host 'Nature's Classroom'.

Name	Address	City State ZipCode	
CAMP SOUANTO	PO Box 931	South Carver, MA 02366	
Contact	Position	Phone Number	Type
Joseph Piche	director	617 224-8419 or 2010	ENVIRONMENTAL EDUCATION CENTER

Non-profit organization which features hundreds of acres of natural forest woodland, and lies adjacent to the Myles Standish State Reservation.

Name	Address	City State ZipCode	
CENTER FOR COASTAL STUDIES	Box 826	Provincetown, MA 02657	
Contact	Position	Phone Number	Type
Joan Wall	admin assistant	617 487-3622	ENVIRONMENTAL ED RESEARCH

A non-profit advisory, education, and research organization in an interdisciplinary approach to the coastal environment. Founded in 1976, the Center was established in response to the urgent need to understand the processes and phenomena of the coastal environment and to communicate these findings to managers and users of the coastal zone.

Name	City State ZipCode		
CHEWONKI FOUNDATION, THE	Wiscasset, ME 04578		
Contact	Position	Phone Number	Type
Tim Ellis	Executive Director	207-882-7323	ENVIRONMENTAL ED CENTER

Five-day camping residential environmental education program stressing Natural History and Team Building; Natural History units taken to schools; five-day leadership training retreats for high school students; fall and spring canoe and hiking trips; winter Natural History of the Everglades Canoe Trips; winter cross country skiing challenge programs.

Name	Address	City State ZipCode	
HABITAT INSTITUTE FOR THE ENV. INC	Box 136, 10 Juniper Road	Belmont, MA 02178	
Contact	Position	Phone Number	Type
Laurel Steinberg	Membership director	617 489-5050	ENVIRONMENTAL EDUCATION CENTER

A 26 acre nature preserve with gardens, greenhouses, library, wildflower garden; Devoted to environmental education for adults and children. Field trips, courses, workshops, lectures for adults. Vacation camps, afterschool programs, guided nature walks provided for child

Name	Address	City State ZipCode	
HALE RESERVATION	80 Carby St.	Westwood, MA 02090	
Contact	Position	Phone Number	Type
John Fortini	Director of Education	617 326-1770	ENVIRONMENTAL ED CENTER

Environmental and Adventure Education including: wild edibles, pond life, animal survival needs and adaptations, canoeing, orienteering, rockclimbing, snowshoeing, and low and high ropes challenge courses. Work with schools, youth and corporate groups.

Name	Address	City State ZipCode	
HITCHCOCK CENTER	525 S. Pleasant St.	Amherst, MA 01002	
Contact	Position	Phone Number	Type
Donna Rowe	Admin Coordinator	413 256-6006	ENVIRONMENTAL ED CENTER

A program-centered environmental education center. Intensive work with elementary schools/teachers. College courses, hikes, trips, courses for the public.

Name	Address	City State ZipCode	
HORIZONS FOR YOUTH	121 Lakeview St.	Sharon, MA 02067	
Contact	Position	Phone Number	Type
Steve Cleaver	director	617 828-7550	ENVIRONMENTAL ED CENTER

A non-profit organization dedicated to serving children. Extensive outdoor education program. Free summer camp for underprivileged.

Name	Address	City State ZipCode	
LLOYD CENTER FOR ENV. STUDIES	430 Potomska Rd	South Dartmouth, MA 02748	
Contact	Position	Phone Number	Type
Dr. Alan Lee Hankin	director	617 990-0505	ENVIRONMENTAL ED CENTER RESEARCH

An education and research organization dedicated to sponsoring educational programs and promoting, supporting, and initiating research to develop a public and scientific understanding of the coastal environment in southeastern New England.

Name	Address	City State ZipCode	
MANICE EDUCATION CENTER	PO Box 953	North Adams, MA 01247	
Contact	Position	Phone Number	Type
Bob Finklestein	executive director	413 663-8463	ENVIRONMENTAL ED CENTER

Emphasises environmental education, wilderness adventure activities, and urban environmental programs.

Name	Address	City State ZipCode	
MANOMET BIRD OBSERVATORY	PO Box 936	Manomet, MA 02345	
Contact	Position	Phone Number	Type
Janis Albright	education director	617 224-6521	ENVIRONMENTAL ED CENTER RESEARCH

Founded in 1969, one of a few centers dedicated for long term studies in environmental biology. Research findings are integrated into educational programs through classes, teacher workshops, and curriculum development.

Name MARIA MITCHELL ASSOCIATION	Address 2 Vestal St.	City State ZipCode Nantucket, MA 02554	
Contact Virginia Kinney	Position Executive Secretary	Phone Number 617 228-0898	Type ENVIRONMENTAL ED MUSEUM

Promotes environmental education and research by museum and aquarium displays; bird & ecology walks; children's nature classes.

Name MASS AUDUBON SOCIETY	City State ZipCode Lincoln, MA 01773
Phone Number 617 259-9500	Type ENVIRONMENTAL EDUCATION CENTER

Call or write to find out what services are offered in sanctuaries near you.

Name NATICK COMMUNITY FARM	Address Eliot St.	City State ZipCode Natick, MA 01760	
Contact Linda Simkins	Position director	Phone Number 617 655-2204	Type ENVIRONMENTAL ED CENTER

Funded through the Recreation Dept., the farm is run by a small, dedicated staff. Gardening, passive solar greenhouse, maple sugaring operation, animal husbandry. Extensively used by schools for field trips. Farm staff have developed study guides, materials, and explanatory texts to accompany visit. Independent or work study projects encouraged.

Name NEW ALCHEMY INSTITUTE	Address 237 Hatchville Rd.	City State ZipCode East Falmouth, MA 02536	
Contact Virginia Rasmussen	Position Education Director	Phone 617 563-2655/2219	Type ENVIRONMENTAL ED CENTER

Non-profit research and education center that promotes stewardship of the Earth's resources through sustainable technologies in food production, shelter design and energy conservation. Principal audiences include small-scale farmers, householders, teachers and students, builders and designers.

Name	Address	City State ZipCode	
NORTHEAST MARINE ENVIRONEMENTAL INST. INC	P.O. Box 666	Monument Beach, MA 02533	
Contact	Position	Phone Number	Type
Mary Shave		617 759-4055	EXPERIENTIAL EDUCATION

Lodging and meals for up to 25 students with use of WET LAB (running seawater).
Resident Biologists and Field Guide Service. Limited Field Resource Library.

Name	Address	City State ZipCode	
NORTHFIELD MOUNTAIN RECREATION	RR1 BOX 377	Northfield, MA 01360	
Contact	Position	Phone Number	Type
Kim Noyes; Trish McCarthy	Env. Ed; Outdoor Rec	413 659-3714	ENVIRONMENTAL ED CENTER

Located on the site of Northeast Utilities Hydroelectric Pumped Storage Station, the center offers an excellent series of planned environmental and recreational activities as well as interpretive programs.

Name	Address	City State ZipCode	
WEB OF LIFE OUTDOOR ED CENTER	PO Box 530; Main St.	Carver, MA 02330	
Contact	Position	Phone Number	Type
Penny Hanlon	director	617 866-5353	ENVIRONMENTAL ED CENTER

Non-profit education and research facility. Ecology, whale watching, and marine mammal research. One day field explorations, in-school activities, general public and special needs programming.

MUSEUMS

Name	Address	City	State	ZipCode
BERKSHIRE MUSEUM, THE	39 South St., U.S. RTE 7	Pittsfield,	MA	01201
Contact	Position	Phone Number		
Thomas G. Smith	Director of Env. Education	413 443-7171		

Museum of Art, Natural History, and History. Exhibitions on animals, birds, biology, minerals, fresh and salt water aquaria.

Name	Address	City	State	ZipCode
BLUE HILLS TRAILSIDE MUSEUM		1904 Canton Ave	Milton,	MA. 02186
Contact	Position	Phone Number		
Caryl Simon-Katler	educational coordinator	617 333-0690		

Museum programs on animal adaptations, honeybees, birds of prey, owls, animal tracks, maple sugaring, endangered species (30 - 60 minute programs). Outreach programs at schools or other sites on native animals, birds, reptiles/amphibians. Resident programs on Blue Hills places and people (half, full day and overnite programs).

Name	Address	City	State	ZipCode
CAPE COD MUSEUM/NATURAL HISTORY		Drawer R, Route 6A	Brewster,	MA 02631
Contact	Position	Phone Number		
Donald Schall	Curator of Education	617 896-3867		

Education field experiences in coastal environment: saltmarshes, tidal flats, barrier beaches, and woodlands. Lectures, classroom presentations, teacher workshops, marine 'wet labs', oceanology cruises, educational seminars, etc. Field excursions: local and foreign. Field natural history classes, and a 24 week school program. Field programs conducted at local center and nearby study areas. Lectures available within region and outside the state upon request.

Name	Address	City	State	ZipCode
CHILDREN'S DISCOVERY MUSEUM		177 Main St; Rt. 27	Acton,	MA 01720
Contact	Position	Phone Number		
Frannie M. Greenberg	Education Director	617 264-4200		

Name	Address	City State ZipCode
CHILDREN'S MUSEUM INC.	276 Gulf Road	South Dartmouth, MA 02748
Contact	Position	Phone Number
Edith Demello	Director	617 993-3361

2 floors of hands on exhibits and animals, nature trail, environmental programs and field trips, exhibits on Nature, Art, Science, and Human Relations. Picnic area & parking.

Name	Address	City State ZipCode
CHILDREN'S MUSEUM, THE	300 Congress St	Boston, MA 02138
Contact	Position	Phone Number
Evelyn Berman	volunteer coordinator	617 426-6500

Name	City State ZipCode
FISHER MUSEUM AT HARVARD FOREST	Petersham, MA 01366
Contact	Position
Francis Phillips	secretary
Phone Number	617 724-3302

A series of dioramas depicting the history of the New England Forest beginning with the first European Settlements in Petersham.

Name	Address	City State ZipCode
FISHERIES AQUARIUM, NMFS	Water St	Woods Hole, MA 02543
Contact	Position	Phone Number
Fred Nichy	director	617 548-5123

Live tank displays of common marine animals of the region.

Name	Address	City State ZipCode
GLOUCESTER FISHERMENS MUSEUM	PO Box 159	Gloucester, MA 01930
Contact	Position	Phone Number
Jean Pena	Asst. to Exec. Director	617 283-1940

Designed to tell the story of the Gloucester Fishermen of yesterday & today, and to operate a marine and fisheries education center for New England Schools. Also a Cetacean research unit, studying the whale migration patterns in the Gulf of Maine.

Name	Address	City State ZipCode
KENDALL WHALING MUSEUM	PO Box 297; 27 Everett St	Sharon, MA 02067
Contact	Position	Phone Number
Robert Webb	Education director	617 784-5642

A major history and art museum of whaling and seal-hunting worldwide, with historical and art collections spanning six centuries and seven continents, providing a full spectrum of museum and educational services.

Name	Address	City State ZipCode
MUSEUM OF SCIENCE	Science Park	Boston, MA 02114
Contact	Position	Phone Number
Barbara Harvey	Education Coordinator	617 589-0100

Name	Address	City State ZipCode
NEW ENGLAND AQUARIUM	Central Wharf	Boston, MA 02110
Contact	Position	Phone Number
Michael Filisky	Asst. Curator of Education	617 973-5200

Name	Address	City State ZipCode
NEW ENGLAND SCIENCE CENTER	222 Harrington Way	Worcester, MA 01604
Contact	Position	Phone Number
Cheryl Rotondo	Education Coordinator	617 791-9211

Name	Address	City State ZipCode
NEW ENGLAND WILD FLOWER SOCIETY	Hemenway Rd	Framingham, MA 01701
Contact	Position	Phone Number
Barbara F. Pryor	Tour Coordinator	617 877-7630; 237-4924

Promotes the conservation of native plants through research and education in botany, horticulture, and ecology. Cultivate 1500 varieties of native plants in naturalistic landscapes and simulated habitats.

Name	Address	City State ZipCode
PLIMOTH PLANTATION	BOX 1620	Plymouth, MA 02360
Contact	Position	Phone Number
Education Dept. Candace Heald	director	(617) 746-1622

Workshops in cultural environments. Interactive, hands-on approach to teaching, talented men and women tell of their beliefs, hopes, fears and aspirations in personal terms to which young people readily relate.

ORGANIZATIONS

Name BILL KOCH SKI LEAGUE	Address 25 Kerry Craig Circle	City State ZipCode Northboro, MA 01532	
Contact Bob Fitzpatrick	Position Central MA Chairman	Phone Number 617 393-3676	Type STATEWIDE ORGANIZATION

Offers boys and girls the chance to participate in cross country skiing and ski jumping at their local club level. The league's purpose is to attract new skiers and to promote lifelong participation in nordic skiing.

Name EDUCATORS FOR SOCIAL RESPONSIBILITY	Address 11 Garden Street	City State ZipCode Cambridge, MA 02138	
Phone Number 617 492-8820	Type REGIONAL ORGANIZATION		

Offers educators comprehensive support and training for working with students on contemporary issues. Curriculum guides, teacher workshops and conferences provide materials and training in a wide variety of areas including nuclear and peace education, conflict resolution, critical and creative thinking, decision-making, and citizen participation. Workshop formats include 1-2 hour introductions, half & 1 day programs and extended programs.

Name HEIFER PROJECT INTERNATIONAL	Address Overlook Farm	City State ZipCode Rutland, MA 01543	
Contact Dorothy Appelgate	Position ed coordinator	Phone Number 617 886-2221	Type EXPERIENTIAL EDUCATION

A working farm focusing on HUNGER, PEACE, AND JUSTICE, livestock management, field crops, human nutrition. Resource Center provides educational materials, brochures, books, films and filmstrips for learning about HPI. Staff and key volunteers available to share the HPI story with schools, churches, service clubs or other groups. Volunteer can assist staff in daily care of livestock, shipment preparation and barn management.

Name INVENTORS ASSOCIATION. OF N.E	Address P.O. Box 335	City State ZipCode Lexington, MA. 02173	
Phone Number 617 862-5008	Type STATEWIDE ORGANIZATION		

Information and support for student invention projects.

Name MA. MARINE EDUCATORS	Address PO Box 241	City State ZipCode Newtonville, MA 02160	
Contact Barbara Passero	Position Director	Phone Number 617 332-9360	Type STATEWIDE ORGANIZATION

Organization whose goal is to 'bring the Ocean into the Classroom' to develop a 'Marine Literate' Public. Holds regular meetings, field trips, conferences for teachers and students and publishes curriculum materials and newsletters.

Name MARINE ED ASSOC OF NORTH SHORE	Address 13 Stewart St	City State ZipCode West Newbury, MA 01985	
Contact Robert Knights	Position director		

Provide field trips, lectures, seminars, slide programs, tours, and workshops.

Name MASSACHUSETTS ENVIRONMENTAL ED. SOCIETY	Address 15 State St.	City State ZipCode Boston, MA 02109	
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Serves as a communications link between professionals. Members receive a monthly bulletin (news & job listings), a journal 3 times a year and discounts to conferences & workshops.

Name MIDDLESEX CONSERVATION DISTRICT	Address 40 Nagog Park	City State ZipCode Acton, MA 01720	
Contact Helen Bowdoin	Position Chairman	Phone Number 617 263-2291	Type REGIONAL ORGANIZATION

Newsletter for teachers - THE CLASSROOM CONSERVATIONIST Workshops for teachers in environmental education Teacher Resource File of environmental education materials Teacher Advisory Board

Name NEW ENGLAND FRISBEE CLUB	Address Box 5	City State ZipCode Princeton, MA 01541 - 0005	
Contact Theo Cade	Position	Phone Number 617 464-5497	Type REGIONAL ORGANIZATION

Frisbee clinics, demos, P.E. Classes, School competitions, etc. Free consultations.

PROFESSIONAL DEVELOPMENT

Name	Address	City	State	ZipCode
BOB DITTER, M.ED.	34 Prince St. #2	Cambridge,	MA	02139
Phone Number	Type			
(617) 964-2250	CONSULTANT/ STAFF DEVELOPMENT			

Consultation and training to Staff re: orientation to program and working with children; workshops on child development, child abuse (staff screening, staff training, detection, crisis intervention, general awareness). Consultation and training regarding programs for LD/ED children and outdoor education.

Name	Address	Clty	State	ZipCode
FITCHBURG STATE COLLEGE	Pearl Street	Fitchburg,	MA	01420
Contact	Position	Phone Number	Type	
David Antaya	Physical Ed Dept	617 345-2151 ext. 3396	COLLEGE COURSES	

The program consists of electives that are one or three credit courses in Recreation and Outdoor Education through the Phys Ed Dept. The program has use of a low ropes course and many community resources such as lakes, woods and parks. Subjects (1 credit) include: X-country skiing; Red Cross Fundamentals of Canoeing; Mountain Hiking; Backpacking; Cycling; Orienteering; New Games; First Aid & Personal Safety. (3 credit): Outdoor Ed; Rec Leadership; Programs in Recreation.

Name	Address	City	State	ZipCode
MARINE CURRICULUM EXCHANGE	57 Crafts St	Newtonville,	MA	02160
Contact	Position	Phone Number	Type	
Angeline Ferris	director	617 964-6862	COLLEGE COURSE	

VOYAGE OF THE MIMI cruises aboard a 95' schooner. Live and study aboard the Harvey Gamage. An exemplary interdisciplinary curriculum of science, technology, and math. Graduate credit available through Lesley College.

Name	Address	City	State	ZipCode
TUNNER BROSOKY	University of Massachusetts	Amherst	MA	
Contact	Position	Phone Number	Type	
Tunner Brosky	professor, consultant	413 665-2657 545-4258	COLLEGE COURSE; CONSULTANT	

Teacher-training; courses & workshops in Adventures Outdoors: using outdoor adventure games & activities; focusing on 'personal growth'.

SCHOOL PROGRAMS

Name ARLINGTON OUTDOOR EDUCATION	Address Science Center 52 Lake St.	City State ZipCode Arlington, MA 02174	
Contact Janet Anderson Kenneth Arnold	Position coordinators	Phone Number 646-1000/ext. 3353	Type SCHOOL PROGRAM

5TH graders spend Monday - Friday at camp facility in Maine.
"Hands-on", experiential approach to teaching
science/environmental awareness in the out-of-doors;
integral part of 5th Grade science curriculum/ the 'wow' of
nature-exploring, discovery, fun stressed.

Name ASTRO-EDUCATION	Address P.O. BOX 54	City State ZipCode Monson, MA 01057	
Contact Jack Megas	Position consultant	Phone Number 413 782 3962	Type CONSULTANT; SCHOOL PROGRAM

Astronomy programs for children (grades 4 - adults); Indoor
slide presentations and outdoor 'star parties'; telescope
making and use; Astronomy Art Sketching Demonstration;
'Learn the Constellations'. Also include: mythology,
moonlore, starlore, art, culture, and anthropology.

Name CAPE COD SEA CAMPS	Address RT 6A	City State ZipCode Brewster, MA 02631	
Contact James Richardson	Position group coordinator	Phone Number 617 896-3451	Type SCHOOL PROGRAM ENVIRONMENTAL ED

Name COURTYARD CLASSROOM	Address Balmer School	City State ZipCode Northbridge, MA 01534	
Contact Robert Stowell	Position Science teacher	Phone Number 617 234-8161	Type SCHOOL PROGRAM ON SITE

Transformed school courtyard to improve appearance and
educational activities. Includes plants, window boxes,
picnic tables, weather station, bird feeders, sun dial,
and several species of dwarf trees.

Name ECOLANDS	Address 6 Maple St; Box 780	City State ZipCode Northborough, MA 01532	
Contact Shirley Griffin	Position program author	Phone Number 617 827-5907 393-8558	Type SCHOOL PROGRAM CURRICULUM

A Land-Use Curriculum Committed to Environmentally Responsible Land Development. Involves students in the land development process, working with : developer, local environmental boards and environmental consultants. Students are involved from the purchase of land to the obtainment of a building permit. Through apprenticeships with consultants and development site collecting data, interpreting engineering plans, and assist in the production of visual materials for presentation before local boards/commissions. Students experience the steps involved in the permitting process and follow the economics associated with the various phases of designing a site for development.

Name ENVIRONMENTAL STUDIES COURSES	Address Quabbin Regional High School	City State ZipCode Barre, MA 01005	
Contact Bill Gauld	Position Science Department	Phone Number 617 355-4651	Type SCHOOL PROGRAM ON SITE

Bill Gauld been running an exemplary environmental studies program for years. Recently received statewide recognition for his expertise and commitment. Course outlines and curriculum guides may be available.

Name FOR SPACIOUS SKIES	Address 54 Webb St.	City State ZipCode Lexington, MA 02173	
Contact Jack Borden	Position director/consultant	Phone Number 617 862-8486	Type SCHOOL PROGRAM CONSULTANT

One to three hour workshop designed to make teachers ongoingly aware of the beauty and wonder of the sky. We then show them how making kids aware of the sky will result in their becoming much better learners. Activity guide available.

Name HOW MUCH DOES A SAND DUNE WEIGH?	Address Blanchard School	City State ZipCode Boroboro, MA 01719	
Contact Barbara Shea Samuel Slarskey	Position Team Teachers	Phone Number 263-4569	Type SCHOOL PROGRAM

A 1987 Lucretia Crocker Fellowship Program where students raise money for a three day trip to Cape Cod where they study local history, geography, ecology and environmental issues.

Name	Address	City State ZipCode	
KENNEDY WEATHER STATION	Kennedy JH School	Natick, MA 01760	
Contact	Position	Phone Number	Type
Richard Whalen		651-7189	SCHOOL PROGRAM ON SITE

Volunteer program for students grades 7-8. Weather observations for our records and Boston TV stations. Preparation of Forecast for school and local areas weather. During severe weather, responsible for weather updates to athletic director Natick High School, Natick Police Dept. and Public Works. Willing to help anyone interested in setting up similar program.

Name	Address	City State ZipCode	
MARINE SCIENCE PROGRAM	NORTH MIDDLESEX REGIONAL H. S.	Townsend, MA 01469	
Contact	Position	Phone Number	Type
Russell White			SCHOOL PROGRAM ON SITE

Marine ecology program for students who have completed biology requirements. One week summer class work one week field environment on Cape Cod with lab work.

Name	Address	City State ZipCode	
MASS AGRICULTURE IN CLASSROOM	P.O. Box 141	Springfield, MA 01102	

Offers fresh ideas and new ways to teach traditional subjects. Social studies, economics, science, nutrition, mathematic and language arts can incorporate up-to-date information about our food system, local and national agriculture. Teacher workshops conducted.

Name	Address	City State ZipCode	
NATURE'S CLASSROOM	RFD 1 Box 410	Southbridge, MA. 01550	
Contact	Position	Phone Number	Type
John Santos	Director	617 764-8321	EXPERIENTIAL ED SCHOOL PROGRAM

Residential outdoor education program for public and private school children at seven New England sites. Project-oriented classes develop student awareness of the relationships of classroom subjects and their importance to student's personal future. During one school week, children and their teachers join staff to explore and learn about different natural environments.

Name NATURETHICS	Address Box 961	City State ZipCode Amherst, MA 01004	
Contact John Green		Phone Number 413 256-8739	Type SCHOOL PROGRAM CONSULTANT

Offers Natural History Slide Presentations and Hikes.

Name NEED COLLABORATIVE	Address North Pamet Rd	City State ZipCode Truro, MA 02666	
Contact Joan Mueller	Position on site director	Phone Number 617 349 -3475	Type SCHOOL PROGRAM ON SITE

Dennis-Yarmouth, Harwich, Falmouth National Environmental Education Development Collaborative. First collaborative in MA and is aimed at providing experientially-based outdoor environmental education to every 5th grader enrolled in public schools of these systems. Classroom spends an entire school week on site in Truro, studying both the ecology and natural environments of the lower Cape.

Name PHYSICS AT RIVERSIDE PARK	Address Franklin High School	City State ZipCode Franklin, MA 02038	
Contact Ron DeFronzo	Position program coordinator	Phone Number 617 528-5600	Type SCHOOL PROGRAM ON SITE

Annually physic students from all over southern New England gather at Riverside Amusement Park in Agawam, MA for a day of problem solving. Based on materials prepared by physics teachers in other states, each student is given a packet of problems that use the rides at the park as a life-sized laboratory. A separate set of problems uses computer simulations to check the students' work and as an aid to having students 'design' new rides. Project is designed to give students a chance to apply the knowlege they have gained in physics class to their own world. 2200 students participated in last year's event.

Name PLANTING & LEARNING ACTIVITY YARD	Address	City State ZipCode Blanchard School	Uxbridge, MA 01569
Contact Bruce Robert Dean	Position coordinator	Phone Number 617 278-2706	Type SCHOOL PROGRAM ON SITE

During the '86 - '87 schoolyear, this project was selected as one the Lucretia Crocker Programs. The North Uxbridge Community Playground, dedicated to R. Buckminster Fuller and his wife Anne, is situated at the Blanchard School in the Uxbridge Public School System. It has been accomplished over a five year period through the cooperative efforts of high school classes, Parent Advisory Council, teachers and town departments. The schoolyard has been transformed into an outdoor classroom, nature center, and research environment for children. Teacher designed lessons for outdoor education. 6 adoption sites in Massachusetts Schools.

Name PROJECT LEARNING TREE	Address 291 Springfield ST	City State ZipCode Chicopee, MA 01013	
Contact Dr. Anne Lombard	Position program rep	Phone Number 413 598-8351	Type SCHOOL PROGRAM

Name PROJECT WILD	Address MA Fisheries and Wildlife	City State ZipCode Westboro, MA 01581	
Contact Ellie Horwitz	Position Chief of education	Phone Number 617 366-4470	Type SCHOOL PROGRAM

Name RONA LEVENTHAL	Address P.O. Box 6194	City State ZipCode Keene, N.H. 03431	
Contact Rona Leventhal	Position Consultant	Phone Number	Type SCHOOL PROGRAM CONSULTANT

Conducts faculty workshops on Initiative Activities and Low Ropes Course; Integration of Arts into the Curriculum; Storytelling; Creative Movement & Drama.

Name	Address	City State ZipCode	
SOLAR-ENVIRONMENT ACTIVITIES CENTER	Raymond E. Shaw Middle School	Millbury, MA 01527	
Contact	Position	Phone Number	Type
Carole Chiras	Coordinator	617 865-3541	SCHOOL PROGRAM

Transformation of middle school courtyard into outdoor classroom/nature center. Includes passive solar greenhouse; student built water fountain-sculpture; landscaped architecture; plants and trees; weather station; sundial. Community-school partnership coordinated through Gifted & Talented Program with Faculty Steering Committee. Consulted with New Alchemy Institute and employing Voyage of the Mimi Curriculum.

Name	Address	City State ZipCode	
STONE ENVIRONMENTAL SCHOOLS	Prescott St	Groton, MA 01450	
Contact	Position	Phone Number	Type
Duane Bond	director	617 448-6837	SCHOOL PROGRAMS

Offers programs to elementary, middle, and junior high schools throughout New England. The curriculum, adjusted to grade level, offers classes on the ocean, salt marsh, forest, astronomy, soils and geology, and human impact on the environment among others.

